The specialist physician training program in occupational health care in Finland

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The article describes the structure, main objectives and pedagogical approach of the 6-year training program of specialist physicians in occupational health (OH) in Finland. There are about 850 specializing physicians (trainees) in OH. The training takes place at work aligned with the goals of the curriculum. The training is about knowledge, skills, attitudes and professional mindset. Tutoring specialist physicians (trainers) at contractual units put these goals into practice. The trainers receive pedagogical training regularly. Special features include e.g. decentralized model of training and diverse university collaboration including the Virtual University in Occupational Health Care.

Keywords: Specialist training, pedagogics, eLearning, blended-learning

1. Introduction to Occupational Health (OH) Service System in Finland

Occupational health care is based on legislation. The principle statutes are Occupational Health Care Act (OHCA 1383/2001) and Government Decree on the principles of good occupational health practice, the content of occupational health care and the educational qualifications required of professionals and experts (GD 708/2013). OH is based on multifaceted, multiprofessional and cross-disciplinary approach. OHA obliges all employers to arrange preventive occupational health care for all their employees. Furthermore, of all employers approximately 90% organize curative care. Private medical clinics are the main service providers (over 50%). However, to guarantee the availability of the services the municipalities are obliged to provide the OH services locally for employers who request them.

2. Specialist Physicians in OH

A physician working full-time in OH-care must be a specialist physician in OH. In general, the specialist physician can work independently, understands the interactions between work and health, has command of occupational health care systems, is able to act in a multiprofessional and multidisciplinary manner, and can interact with service systems at the workplace and in the society. Also, he/she is able and willing to update his/her professional know-how as many of the aspects of the discipline and work-life are continuously changing. (OHA 2001). The main task of OH-physicians (OHP) is to enhance and support the work ability and working careers. There are approximately 850 specialist OHPs in Finland, while the employed labor force is over 2.4 million persons.

3. The Organization of and Objectives of Training

Ministry of Social Affairs and Health Decree on the Training of Specialist Physicians.... (STM 56/2015) states that in general the training contains defined sections working as a physician under tutelage of an assigned trainer and with in-service training, theoretical studies, obligation

to assess own progress and training, and national theoretical examination. Depending on the discipline the training program is either 5 or 6 years in length after graduating a physician (table 1).

In general, Ministry of Health and Social Affairs is responsible for the training program. The five medical universities are responsible for the curriculum. In practice the training takes place working as a physician under tutelage in contractual units. The unit will appoint trainee a personal trainer approved by the university. The trainer is responsible for the implementation of the training program. He/she gives personal tutelage to the trainee two hours a week. He/she also guides the professional growth of the trainee, monitors the implementation of the trainee's compulsory personal specialization plan, and assesses the learning process together with the trainee. However, a personal trainer is not required in clinics.

After the training program the trainee

- knows the interaction between work and health
- can prevent the harmful effects of work on health and promote the work ability of and with the individual employees, work places and multi-professional OH-team
- can asset and support work ability together with the work places, primary and special health care, rehabilitation, social security system and employment authorities
- is able to set goals, justify actions needed and asset the effects of these actions in cooperation with the work places

Table 1. The 6-year training program of specialist physicians in occupational health (OH) in Finland.

Service in municipal health centres and hospital, 9-12 months Service in occupational health service, 6 months Other university approved service, 6-9 months		Theoretical courses 100 hours Management training 10-30 ECTS
Specialized qualification training, 4 years •Training in occupational health care units, 2 years •Rotation in other relevant clinical disciplines, 1 year •Assessment of work ability and physical rehabilitation, 6 months •Service at the Finnish Institute of Occupational Health, 6 months	Evaluation The use of logbook after every 6 months and always at the end of a rotation	10-30 EC13

3.1. The Basic Qualification Training (24 months)

The overall objective of this section of training is to prepare the physician to work independently as a general practitioner in primary health care. The training must include at least nine months of service in a municipal health care center. At least six months must be served in clinical rotation in a hospital and at most six months may be served at some other university-approved public or private health care unit performing duties of a general practitioner.

3.2. The Specialized Qualification Training (48 months)

This section prepares the trainee for the profession and activities of the OHP. The trainee fills a logbook to document the training received and to reflect his/her training and learning along the whole training program.

3.2.1. Occupational Health Care (24 months)

After the section the trainee has a thorough understanding of OH-services, processes and multiprofessional activities. The trainee will be able to act as an OH-expert with the workplaces and other relevant entities, in accordance with the good occupational health care practices. This section takes place in a contractual municipal or private OH-care unit. In addition to the personal tutelage the unit will provide the trainee with in-service training of two hours per week. The inservice training consists of clinical meetings, supervised workplace visits, study groups, seminars, reviews of professional journals and literature etc.

3.2.2. Assessment of Work Ability and Rehabilitation (6 months)

The section improves skills to assess work ability and overall functional ability, and the rehabilitation of working-aged people. Primary training units are the rehabilitation assessment units in major hospitals and the contractual rehabilitation institutes.

3.2.3 Clinical Service (12 months)

The main goal of this section is to increase the competence to operate with the most important diseases of working-aged people. At the same time the knowledge about the work-related diseases is enhanced. The trainee will participate the in-service training and theoretical seminars and courses for about three hours a week.

Clinical service is completed in at least three acceptable clinics and three months of service is required in each of them. Acceptable clinics are dermatology, internal medicine, neurology, oto-rhino-laryngology, physiatrics, pulmonary diseases, psychiatry and surgery. The emphasis should be on outpatient work.

3.2.4 Finnish Institute of Occupational Health FIOH (6 months)

This section focuses on occupational medicine, applied research in occupational health care, and introduces the principles of scientific research. The trainee also familiarizes with scientific disciplines supporting OH-care such as toxicology, occupational hygiene, work physiology, work psychology, ergonomics, epidemiology and health economics. There are five local offices of FIOH in Finland.

3.3 Theoretical Studies (100 hours) and Management Training (10-30 ECTS)

Theoretical studies are comprised of multifaceted themes: OHP and the employer organization, OHP and the individual employee, OHP and the society and OHP as a professional.

The training program also includes the multiprofessional management training worth 10 ECTS with the exception in Helsinki University (30 ECTS). The training is organized by the universities.

3.4 Evaluation

The trainee shall evaluate the training and the development of his/her competencies together with the trainer at least every 6 months. The evaluation is documented in the logbook, which is approved by the university before graduation. The national exam evaluates the theoretical part of competencies at the end of the training program.

4. The Pedagogical Approach

During the sections the trainee works as a physician under tutelage. So, the training takes place at work aligned with the objectives of the curriculum. The pedagogical approach consists of several theories like blended learning. Also, the trainers receive pedagogical training yearly. The objectives of the curriculum are checked and revised every two years by the universities.

5. What is specific?

The tasks and objectives of OH-services vary greatly in Europe and the world. In Finland these are defined in legislation and reflected in the training program of the OHPs.

Auditing, evaluation of and research activities on the training program are regularly performed by the universities. The latest auditing report has been published in the series of the Ministry of Social Affairs and Health including an abstract in English (Räsänen et al 2015).

The curriculum is unified nationally, which is not common among the 50 medical disciplines. The training program enables the majority of the training to take place almost anywhere in Finland, not only in the cities with universities or major hospitals. Training can take place in contractual units in the private sector, too. Also, OH is one of the few disciplines to offer pedagogical training for the trainers. The wide collaboration of the five medical faculties has been discussed earlier.

In addition, the Virtual University in Occupational Health Care (VUOHC) is a collaborative result of the five universities. VUOHC offers about 50 courses in Moodle learning environment, varying from tutored eLearning and blended learning to self-study and case-based courses on central topics in OH. Web-based learning is particularly suitable in Finland for scarce population and long distances and for this most decentralized training program. The courses are voluntary and free of charge.

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